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			EXAMINER MATZEK, MATTHEW D	
			ART UNIT 1771	PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/688,583  
Filing Date: October 17, 2003  
Appellant(s): LOWE, CLIFFORD A.

**MAILED**  
SEP 14 2006  
**GROUP 1700**

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David G. Burleson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5/18/2006 appealing from the Office action mailed 12/19/2005.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejection of claims 13, 25 and 29 in view of Kittel et al. (US 6,228,486) have been withdrawn because Kittel et al. fail to teach a textured upper surface and teach a protective layer thickness outside of the instantly claimed ranges.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 6,180,228 B1      Mueller et al.    01-2001

US 6,228,486 B1      Kittel et al.      05-2001

US 5,468,532          Ho et al.          11-1995

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 3, 8, 11, 12, 19 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller et al. (US 6,180,228).

- a. Mueller et al. disclose an outdoor advertising or display system including a multi-layer graphic article intended for application to an outdoor surface (Abstract). The base layer (fabric matrix or support) may be a film (16 Figs. 1 and 2), but may be reinforced with a woven or nonwoven scrim layer, or a layer of fibrous material (col. 2, lines 30-32 and col. 5, lines 37-40). This fibrous material may be incorporated between two layers [o]f polymeric film to form a reinforced base sheet construction (col. 5, lines 38-44). Examiner equates the applied film to the instantly claimed fabric matrix and nonwoven fabric matrix because it contains a fabric between two polymeric layers. On a first major surface (lower surface) of the base layer an adhesive layer (22 Figs. 1 and 2) is applied (col. 5, lines 48-50). An image layer (24 Figs. 1 and 2) is disposed on a second major

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surface (upper surface) of the base layer (col. 6, lines 30-32). The image-protective component **30** overlies the image layer **24** and is substantially clear or transparent (col. 7, lines 4-13). A release liner may be placed on the adhesively treated base film (col. 4, lines 17-20). Claim 3 is rejected as small abrasive particles (**54** Fig. 2) may be embedded in the outer binder layer or protective layer to provide skid resistance on the surface (col. 8, lines 30-34).

b. The applied invention can include one or more tie layers between otherwise adjacent layers of the article (col. 5, lines 44-47). The Examiner equates the tie layers of the applied art to the primer layers inferred in the instant claims. This allows for primer layers on the upper and lower surfaces of the fabric matrix.

c. The base layer may comprise polyolefins (col. 5, lines 16-27). Claim 11 is rejected as the thickness of the base layer may be between about 1 mil (0.003cm) to about 10 mils (0.03cm) (col. 5, lines 28-32). Claim 12 is rejected as the base film adhesive layer should be applied at a thickness of about 2 mils (0.005cm) to about 10 mils (0.025cm) (col. 6, lines 20-25). Claim 21 is rejected as the image-protective layer **32** may be polyurethane (col. 7, lines 18-20). Claim 22 is rejected as layer **32** may be polyurethane, but the solvent used to create the layer is not present in the final product and as such is not part of the instantly claimed/applied article. Claim 23 is rejected as layer **32** may further comprise an acrylic adhesive (col. 7, lines 36-38). Claim 24 is rejected as the upper surface of the applied article has a textured upper surface (Figure 1).

2. Claims 19, 5, 7-9, 11, 12 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kittel et al. (US 6,228,486).

a. Kittel et al. disclose a thermal transfer laminate comprising a facestock (fabric matrix or support), an underlying adhesive layer, an overlying adhesive layer (primer), a transparent, abrasion resistant layer (protective coating) overlying the adhesive layer and another overlying adhesive layer on top of the abrasion resistant layer (Abstract). In one embodiment an ink or graphic layer overlies the upper surface of the facestock layer (Abstract). Examiner takes the position that the protective coating layer includes the abrasion resistant layer and underlying adhesive layer. The instant claims do not preclude such an embodiment.

b. Claims 7 and 8 are rejected as the facestock layer may comprise a core that may be made of either woven or nonwoven fabric (col. 3, lines 38-40).

c. Claims 5, 19, and 20 are rejected as tie layers of adhesive resin (primer) may be placed on the upper and lower surfaces of the facestock layer (col. 8, lines 59-61). These adhesive tie layers may comprise polyurethane (col. 9, lines 48-67). The facestock layer (fabric matrix) typically has a thickness of about 1 to about 25 mils or 0.0025 cm to 0.63 cm (calculation performed by Examiner) (col. 3, lines 9-12). The adhesive layer thickness may range from about 0.00025 cm to 0.013 cm (calculation performed by Examiner) (col. 3, lines 15-18).

***Claim Rejections - 35 USC § 103***

3. Claims 5, 20 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 6,180,228). The invention of Mueller et al. is silent as to the composition and thicknesses of the primer layers and the use of protective layer from about 7 to 8 mils.

- a. Claims 5, 20 and 25 are rejected as it would have been obvious to one of ordinary skill in the art at the time of the invention to have used either acrylic or urethane resins in the primer layers. The skilled artisan would have been motivated by the fact that both acrylic and urethane resins have been disclosed throughout the invention of Mueller et al. (col. 5, lines 60-65, col. 7, lines 36-38).
  - b. Claim 29 is rejected as the thickness of the outer protective layer is a result-effective variable as the image on the base film cannot become obscured or damaged from foot traffic to assure continued good brand recognition (col. 2, lines 35-40). Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the claimed ratio, it would have been obvious to one of ordinary skill in the art to optimize this result-effective variable by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).
4. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 6,180,228), as applied above to claims 19, and further in view of Ho et al. (US 5,468,532). The invention of Mueller et al. is silent as to the thicknesses of the protective layer.
  - a. Ho et al. disclose a multilayer graphic article comprising a substrate, at least one color layer disposed on the substrate, and a protective surface layer that overlies the substrate and the color layer (Abstract). Example 13 teaches a 51 microns or 2 mil protective surface layer.
  - b. Since Mueller et al. are from same field of endeavor (i.e. multilayer graphic articles) the purpose disclosed by Ho et al. would have been recognized in the pertinent art of Mueller et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the protective surface layer of Mueller et al. with the thickness taught by Ho et al. The skilled artisan would have motivated by the desire to successfully create a multi-layer graphic article with a protective coating thick enough to maintain the integrity of the underlying graphic/image layers.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as obvious over Kittel et al. (US 6,228,486). While Kittel et al. is silent to the specific composition of the woven or nonwoven fabrics used in the facestock layer, it would have been obvious to have made said fabric from chemical species listed in instant claim 10 as it is disclosed that the fabric is to be made from natural or synthetic fibers and Kittel et al. teach the use of polyamides and polyesters in the facestock layer (col. 3, lines 37-63). The Examiner interprets that the compositions taught by Kittel et al. for the polymeric film of the facestock are suitable materials for nonwoven or woven substrates since the reference teaches that the facestock may include both films and nonwoven/woven substrates it would have been obvious to one of ordinary skill in the art at the time of the invention to have made both layers out of the same material. The skilled artisan would have been motivated to use a constant chemical composition throughout the invention in efforts to minimize costs and maximize the compatibility between layers.

#### **(10) Response to Arguments**

6. Appellant argues that optional reinforcement layer is a separate, distinct layer and not part of base layer 16 and that image layer 24 is necessarily separated from the optional reinforcement layer by base film 16, which is taught as receiving the image. Examiner has interpreted the reinforced base layer (fabric matrix or support) comprising a fibrous material



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between two layers [o]f polymeric film to form a reinforced base sheet construction (col. 5, lines 38-44), because as a laminated product the film layers will conform to the supporting fabric.

This results in a “fabric matrix” with a fabric surrounded by polymeric film.

7. Appellant argues that Examiner has improperly relied upon a website reference. In the instantly applied rejection Examiner has only relied upon U.S. Patents for the basis of rejections and the aforementioned website had only served as evidence and not an actual prior art reference. All mention of the aforementioned website have been removed from the grounds of rejection set forth in this Answer.

8. Appellant argues improper hindsight as one of ordinary skill in the art at the time the invention was made would not have interpreted the teachings of Mueller et al. to provide for a “textile film”. Examiner has set forth an interpretation of the Mueller et al. reference based upon only said reference. The fabric matrix has been provided for since a fabric material has been set between two polymeric films prior to lamination. Said lamination would cause the film layers to conform and infiltrate the fabric material thereby creating the instantly claimed “fabric matrix”.

9. Appellant argues that the inclusion of particular resins in a separate adhesive layer does not make obvious their use as fabric layer primers. Examiner contends that it would have been obvious to look to the adhesive layers of the applied invention as guidance as to sufficient compositions to be used as primer layers as primer layers serve the same function as adhesive layers (i.e. improve the bond between adjacent layers).

10. Appellant argues that Examiner has failed to explain why any thickness of protective layer used over an image-bearing fabric substrate constitutes “discovering the optimum or workable ranges” where the reference in question is completely silent about the property in

question. As addressed supra in paragraph 4b, as the thickness of the outer protective layer is a result-effective variable as the image on the base film cannot become obscured or damaged from foot traffic to assure continued good brand recognition (col. 2, lines 35-40). Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the claimed ratio, it would have been obvious to one of ordinary skill in the art to optimize this result-effective variable by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

11. Appellant argues that Kittel et al. fail to teach a print-receiving surface with a primer layer. This limitation of claim 5 has been declared contradictory to the limitations set forth in its parent claim 19 and as such the claim is indefinite. Appellant is directed to col. 8, lines 59-61, which specifically states that adhesive resin (primer layers) may be positioned between the core layer (fabric matrix) and either or both film layers for enhancing adhesion. Therefore, this teaching provides for primer layers on both the upper and lower surfaces of the core layer.

12. Appellant argues that Examiner has improperly interpreted the Kittel et al. reference in that the adhesion-promoting layer 130 and abrasion-resistant layer 140 are formed separately by different processes and serve distinct functions. Examiner has interpreted the adhesion-promoting layer and the abrasion-resistant layer to be the instantly claimed layer protective coating layer as both layers serve to protect the image layer through their physical properties and barrier between the image layer and possible contaminants or damaging effects. As such, the protective layer is disposed upon and directly contacts the image layer.

13. Appellant argues that Kittel et al. reference suggests that such an interpretation is not in accord with the applied invention as in other sections of the reference the inventors referred to

separate layers both individually and collectively. Therefore, the inventors know how to indicate that multiple layers can be treated as a unitary element for certain purposes. Examiner has set forth his interpretation of the Kittel et al. and the motivation for such an interpretation in the previous paragraph.

14. Appellant argues that the use of phrase “an outer protective layer” implies or indicates that the layer in question is unitary and applied in a single process. Examiner has provided his interpretation of the Kittel et al. reference supra, which sets forth a unitary protective layer. The argument of implying that the layer is applied in a single process, it is noted that this feature is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

15. Appellant argues that Examiner has used improper hindsight to reject claim 10 as Examiner has not set forth motivation to create the fabric layer with the instantly claimed composition. Examiner disagrees with such an assertion. With only the teaching that the fabric layer may be made of synthetic fibers, one of ordinary skill in the art at the time the invention was made would have looked to the compositions of the fabric layer equivalents set forth in the same reference. This is what has been done by Examiner. The applied reference states that in place of a fabric layer the layer may be a polyamide or polyester layer (col. 3, line 36-col. 4, line 24).

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Matthew D. Matzek



Conferees:

Terrel Morris — 



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

Carol Chaney 